



GROUP
Chassis


MODEL
2014MY
Optima Hybrid
(TF HEV)

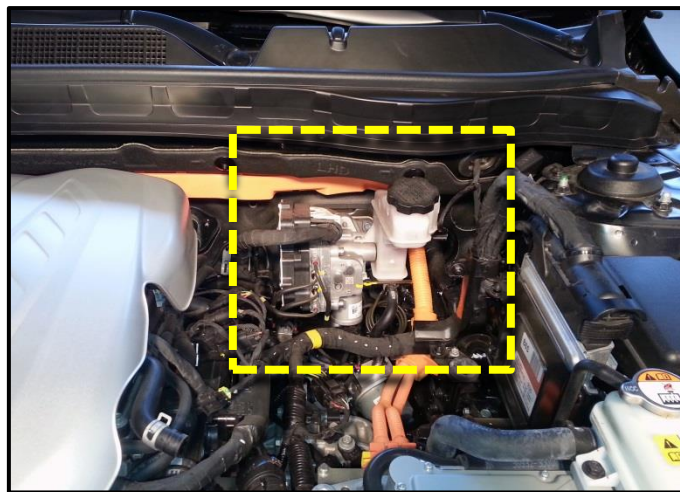
NUMBER
052

DATE
February 2015

TECHNICAL SERVICE BULLETIN

SUBJECT: 2014MY OPTIMA HYBRID - NOISE DURING BRAKE ACTUATION

This bulletin provides information to address a brake noise concern on some Optima Hybrid (TF HEV) vehicles, produced from December 2, 2013 through October 22, 2014, which may exhibit a “squeaking” and/or “honking” noise when applying the brakes rapidly. Access the TSB on KGIS and press the  button (upper right hand corner) to download and listen to the sound file, in order to become familiar with the particular brake noise. If confirmed, follow the procedure outlined in this bulletin to resolve the concern.



WARNING

Caution labels are attached to all the high-voltage components. High-voltage cables and connectors are orange colored. Do not touch any of these high-voltage components, cables or connectors without proper protective gear and training.

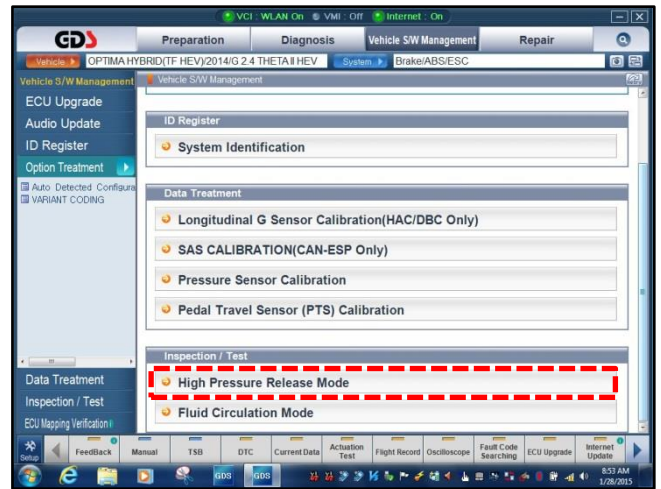
File Under: <CHASSIS>

Circulate To: General Manager Service Manager Parts Manager
 Service Advisor(s) Technician(s) Body Shop Manager Fleet Repair

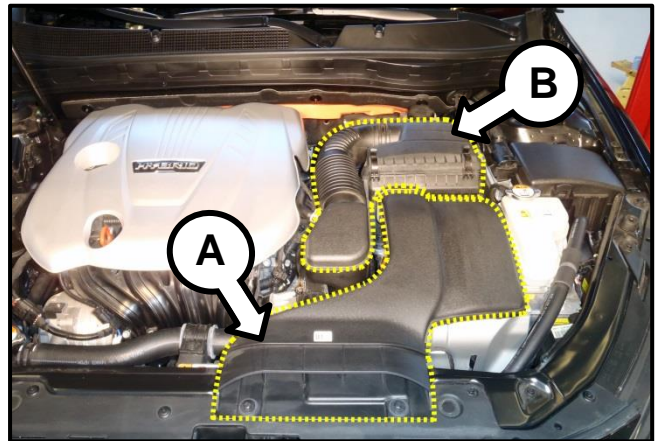
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Service Procedure:

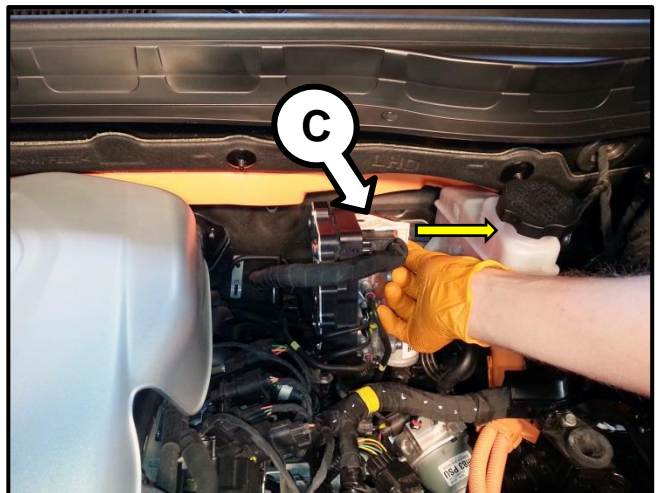
1. Prior to starting the procedure, access GDS > Vehicle SW Management > Inspection/Test > High pressure Release Mode to relieve brake fluid pressure.



2. Open the hood and remove the air duct (A) and air cleaner box (B).



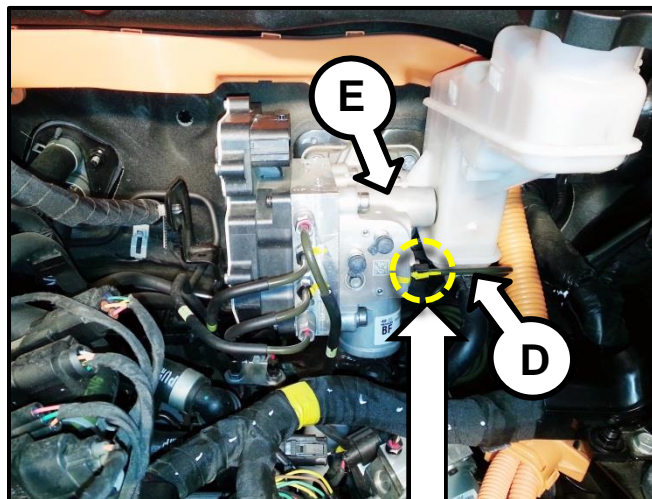
3. Disconnect the IBAU connector (C), as shown.



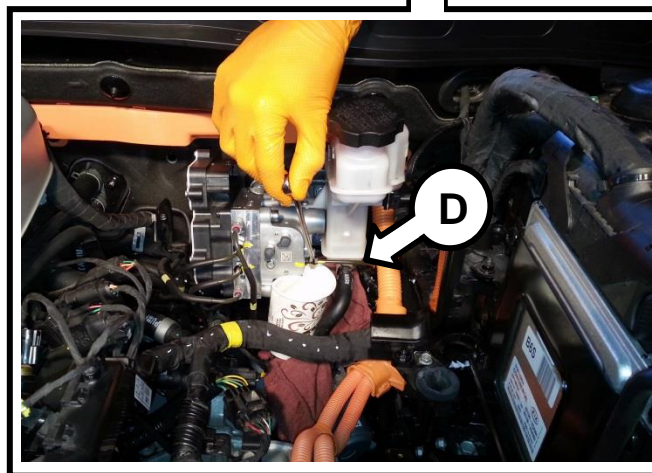
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4. Remove the upper mounting location for the brake line (D) at the Master Cylinder (E).

Tightening torque:
10.1 ~ 12.3 lb-ft (13.7 ~ 16.7 Nm)


*** NOTICE**

Place a shop rag and a cup to contain any brake fluid that may leak during removal.

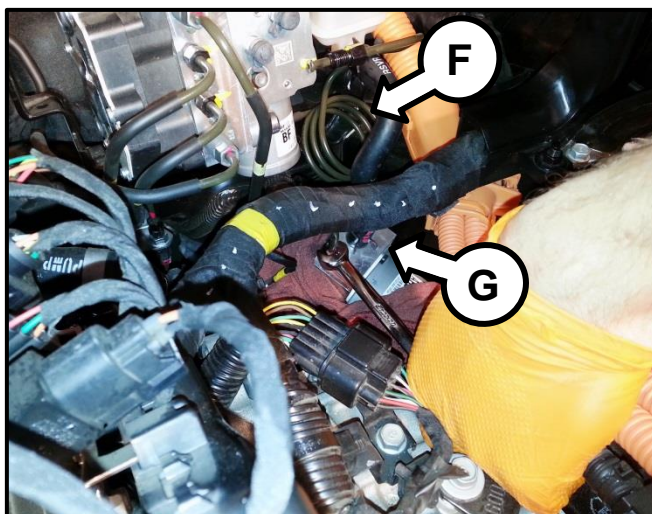


5. Remove the lower mounting location for the brake line (F) at the Hydraulic Power Unit (HPU) (G).

Tightening torque:
10.1 ~ 12.3 lb-ft (13.7 ~ 16.7 Nm)

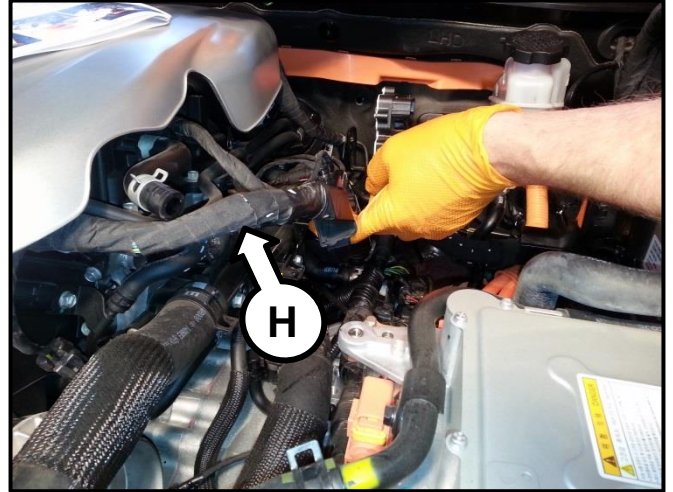
*** NOTICE**

Place a shop rag around the HPU to contain any brake fluid that may leak during removal.



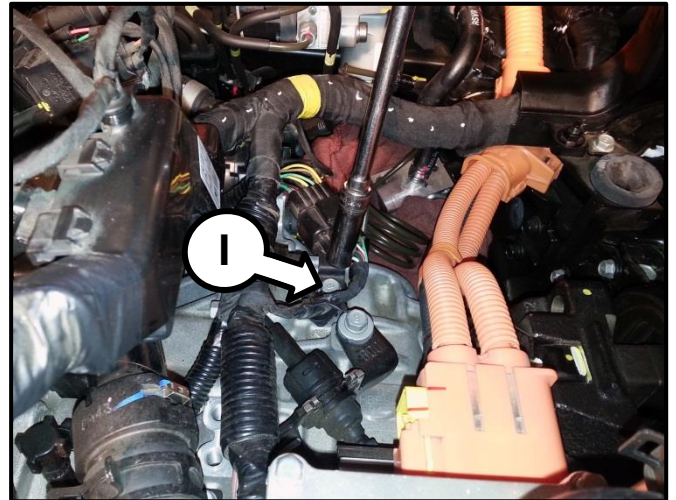
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6. Remove the attachment points for the engine harness (H) and pull it away from the engine.

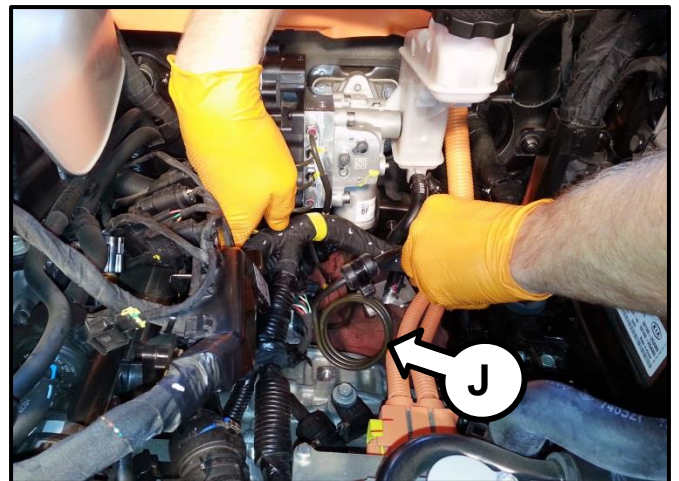


7. Remove the bolt (I) securing the engine harness to the transmission, as shown.

**Tightening torque:
8.1 ~ 10.3 lb-ft (10.9 ~ 13.9 Nm)**

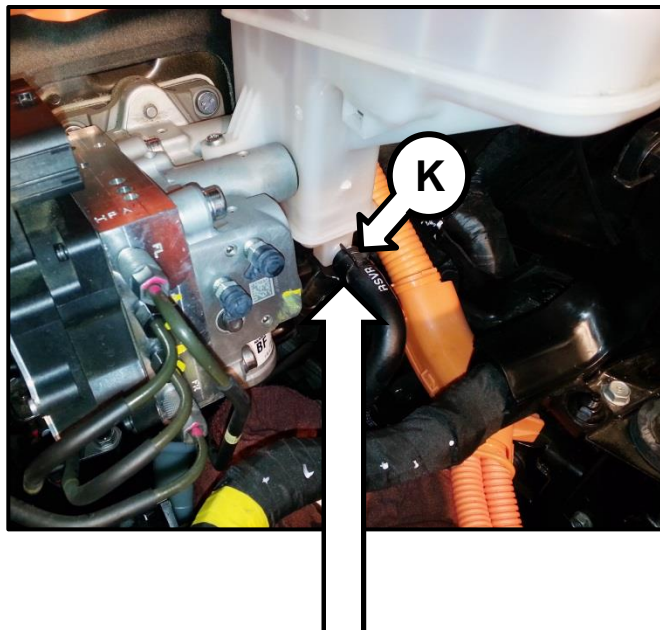


8. Lift the engine harness out of the way and remove the brake line (J), as shown.

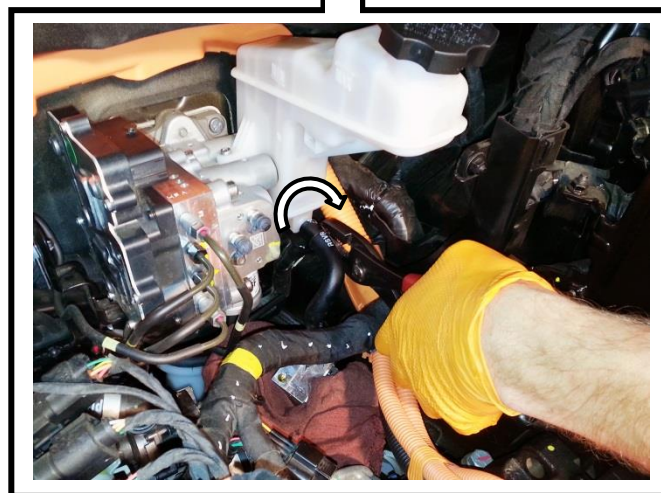


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9. Locate the constant tension clamp (K) on the brake fluid reservoir hose.



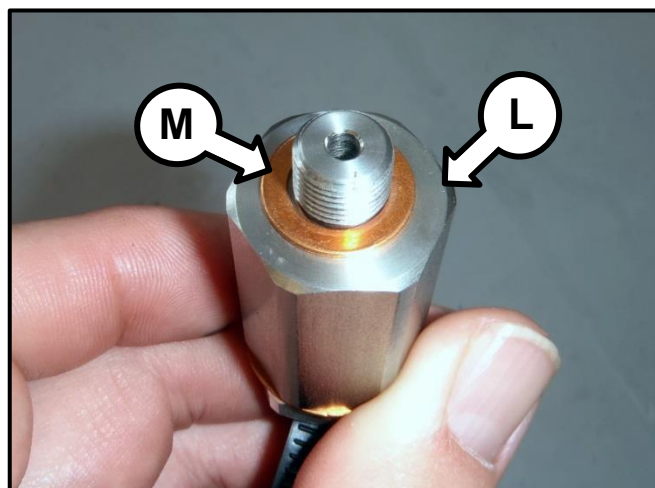
10. Use a pair of pliers to rotate the constant tension clamp 180° to the right.



11. Prior to installation, inspect the Damping Chamber (L) to make sure the crush washer (M) is present.

*** NOTICE**

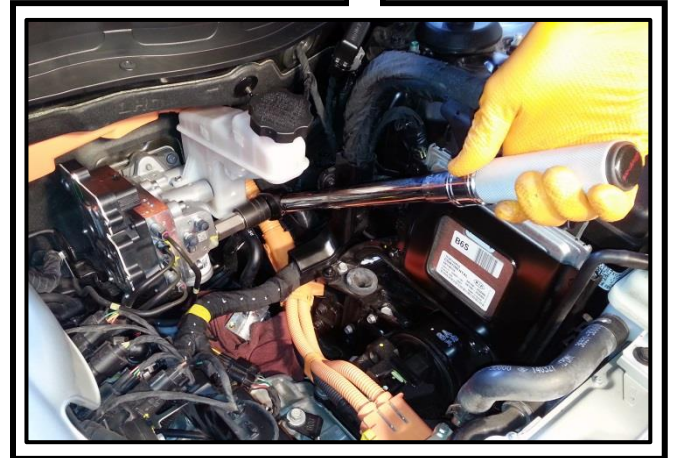
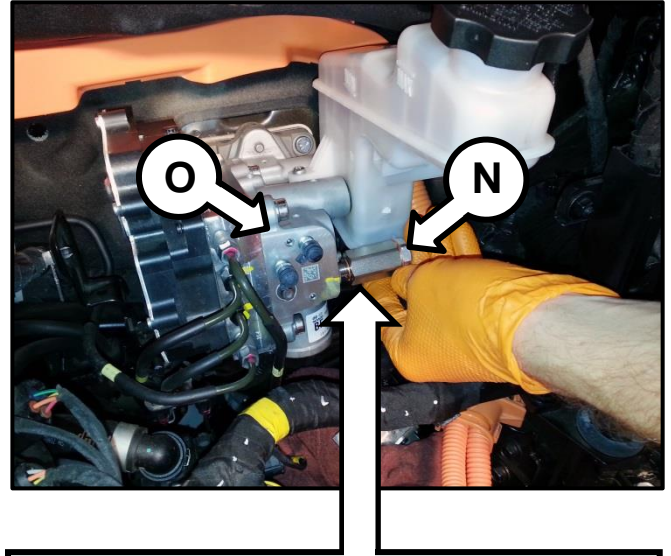
If the crush washer (M) is misplaced, order P/N 17512-10000.



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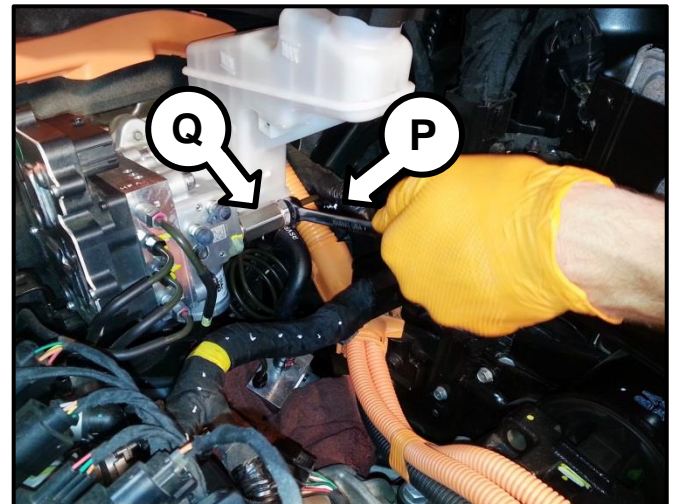
12. Install the Damping Chamber (N) onto the Master Cylinder (O), as shown. **NOTE: Make sure the crush washer is in place prior to tightening the Damper Chamber (N).**

Tightening torque:
25.3 ± 3.6 lb-ft (34.3 ± 4.9 Nm)



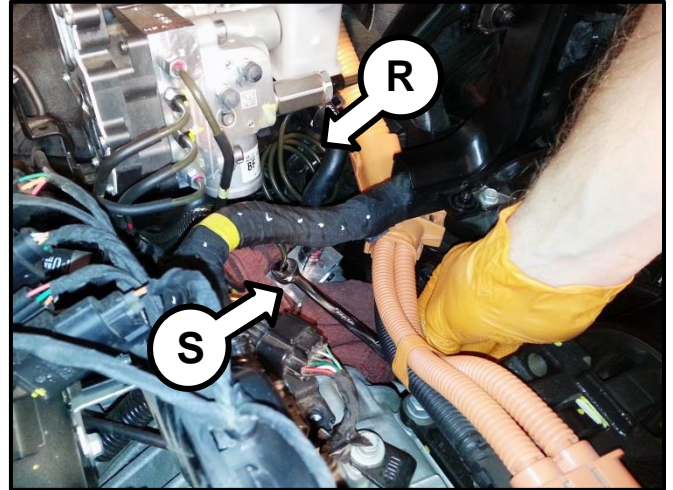
13. Install the new brake line assembly (P) onto the Damping Chamber (Q) on the Master Cylinder.

Tightening Torque
10.1 ~ 12.3 lb-ft (13.7 ~ 16.7 Nm)

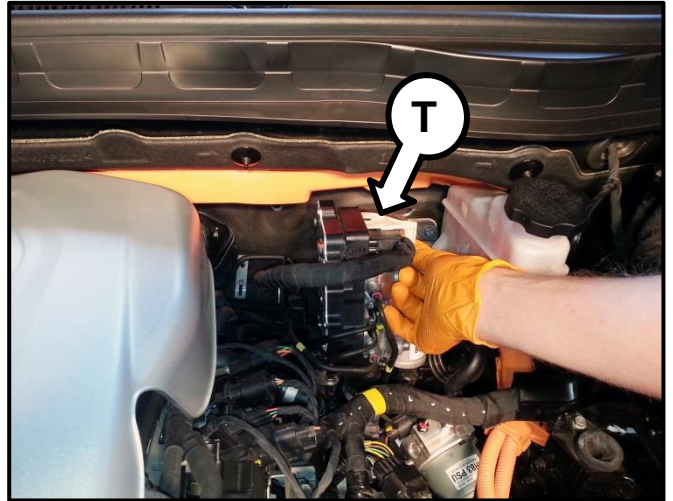


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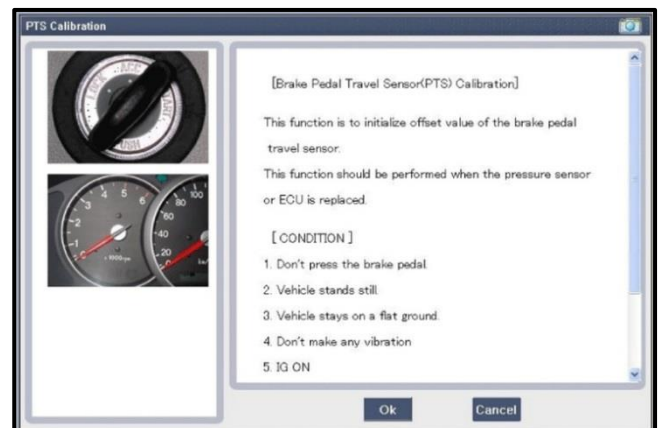
14. Install the new brake line assembly (R) onto the HPU (S).

Tightening Torque
10.1 ~ 12.3 lb-ft (13.7 ~ 16.7 Nm)


15. Reconnect the IBAU connector (T).



16. Reinstall all removed components by reversing the order of removal.
17. Perform the HEV brake bleed procedure per the applicable workshop manual on KGIS.
18. After performing the brake bleed procedure, perform the PTS Calibration Test using GDS.
19. After calibration is complete, verify proper brake operation and confirm the noise is no longer present.






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AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Optima Hybrid (TF HEV)	From December 2, 2013 through October 22, 2014

PART INFORMATION:

Part Name	Part Number	Qty.	Figure
HPU NOISE FIX KIT	58670-4U005FFF	1	
			
BRAKE FLUID DOT 3 HD	UM040 CH013	1	

WARRANTY INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	58727 4U500	1	Q43	ZZ5	(CHA 052) Hybrid Brake System Procedure	58670F01*	1.1 M/H	58670 4U005FFF	1

*Op code Includes brake bleeding and GDS PTS calibration

Note: Use sublet code X1 for reimbursement of brake fluid (\$5.11 maximum).